

Unit 5 Lesson 2c

Classwork
Homework

Fill in chart.

| | Curve | Amplitude | Range | Period |
|---|---------------------------------------|-----------|-------|--------|
| A | $g(x) = 3\sin\frac{1}{2}x + 1$ | | | |
| B | $g(x) = -5\cos 3x$ | | | |
| C | $g(x) = \frac{1}{2}\sin 4x - 3$ | | | |
| D | $g(x) = -\frac{2}{3}\cos\frac{1}{4}x$ | | | |
| E | $g(x) = 5\cos 2x + 2$ | | | |
| F | $g(x) = \frac{1}{2}\sin\frac{2}{3}x$ | | | |
| G | $g(x) = -4\cos\frac{1}{3}x$ | | | |

Sketch and clearly label a full period for each equation.

2. Fill in missing information. Write a sine equation and graph.

| | | AMPLITUDE | RANGE | PERIOD |
|---|----------|-----------|-------------------------------|------------------|
| A | $g(x) =$ | 6 | $[-6, 6]$ | $\frac{2\pi}{3}$ |
| B | $g(x) =$ | | $[-4, 4]$ | 3π |
| C | $g(x) =$ | 2 | $[1, 5]$ | $\frac{\pi}{2}$ |
| D | $g(x) =$ | | $[-\frac{1}{2}, \frac{1}{2}]$ | 6π |

3. Fill in missing information. Write a cosine equation and graph.

| | | AMPLITUDE | RANGE | PERIOD |
|--|----------|---------------|-----------|--------|
| | $g(x) =$ | +3 | | 2π |
| | $g(x) =$ | | $[-2, 2]$ | π |
| | $g(x) =$ | 3 | $[-3, 3]$ | |
| | $g(x) =$ | $\frac{2}{3}$ | | 4π |